

## REMARKS

In response to the above-identified final Office Action independent Claims 1, 17, and 20 have been amended in a manner that does not raise new issues, but which stresses a distinction of the present invention over the prior art. A basis for the amendments is found at page 25, lines 16-20 of the Specification.

Particularly, in accordance with Applicant's claims the invention relates to an image forming apparatus wherein image data is corrected for density characteristics by a smoothing process. For example, the concluding clause of the independent claims states "wherein the number of pieces of data in the smoothing process is selected on the basis of density reproduction characteristics of said image forming apparatus."

Referring to the cited references, the cited Hayashi patent discloses, at col. 14, lines 11-15:

FIGS. 6 (a) and 6 (b) are diagrams for explaining the processing for producing a gradation correcting curve in more detail. A predetermined number of curve patterns P1, P2, P3, . . . produced on the basis of experience are stored in the ROM 72, as shown in FIG. 6 (b). The curve patterns are stored as a table of output data corresponding to all gradation values of input data.

For example, it is assumed that a pre-gradation correcting curve calculated by printing a test pattern image and reading the same by the scanner section 1 is as shown in FIG. 6 (a). It is the curve pattern P4 which is closest to the calculated pre-gradation correcting curve. In this case, therefore, the output pattern P4 is employed as a gradation correcting curve.

Also, at lines 49-61 of col. 14, Hayashi states:

The whole gradation section may be divided into a low gradation section R1, a middle gradation section R2 which is a straight line portion and a high gradation section R3, to carry out pattern matching in the whole gradation section in such a manner

that a matching method using the operation conforming to the foregoing equation (1) is used in the low gradation section R1 and the high gradation section R3 and the slope of a straight line is compared between the pre-gradation correcting curve and the curve pattern in the middle gradation section R2, or to carry out pattern matching on the basis of the number of changed points and the slope in the low gradation section R1 and the high gradation section R3."

Accordingly, Applicant submits that Hayashi discloses a pre-gradation correcting curve and curve patterns stored in the ROM 72 that are subjected to matching to select the appropriate curve pattern, whereby the curve pattern subjected to smoothing is determined, and, the above matching is executed with respect to each of the plural gradation sections R1-R3. In any event, however, it appears from the Office Action that the PTO asserts that col. 14, lines 49-61 of Hayashi discloses the concluding clause of Applicant's independent claims; namely, "wherein the number of pieces of data in the smoothing process is selected on the basis of density reproduction characteristics of said image forming apparatus" (see page 5, lines 18-19 of the Office Action). On the contrary, in Hayashi, the number of pieces of data constituting each gradation section is not related to the density reproduction characteristics of the image forming apparatus.

Thus, it is seen that col. 14, lines 49-61 of Hayashi does not suggest the feature of the present invention as recited in amended independent Claims 1, 17 and 20 that the number of pieces of data in the smoothing process is selected on the basis of the density reproduction characteristics of the image forming apparatus.

This feature of Applicant's claimed invention is important in that, if the density reproduction characteristics of the image forming apparatus are poor, it is possible to increase the

accuracy of smoothing by enlarging the number of pieces of data in the smoothing process, whereby it is possible to create a successful correction table. The disclosure of the cited Hayashi reference does not achieve a significant effect of the present invention.

Similarly, the cited Nakamura and Murayama patents also fail to disclose the above feature of the present invention.

For these reasons it is believed that this application is in condition for the issuance of a Notice of Allowance.

Applicant's undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,



---

John A. Krause  
Attorney for Applicant  
Registration No. 24,613

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Facsimile: (212) 218-2200